

### **REMARKS**

This is in response to the Office Action mailed on April 26, 2004, and the references cited therewith.

No claims are amended, cancelled, or added; as a result, claims 1-22 remain pending in this application.

#### **§102 Rejection of the Claims**

Claims 1-2, 4, 8, 10-11, 13-15, 18 and 20-21 were rejected under 35 USC § 102(b) as being anticipated by Fullerton (U.S. Patent No. 5,995,534).

Fullerton describes a system in which a coded timing signal 1014 output from a code time modulator 1008 is fed to a subcarrier time modulator 1016 to produce an output stream of pulse position modulated pulses 1026. The modulated pulses 1026 are then provided to an output stage 1028, such that the modulated pulses act “as a trigger to generate electrical monocycle pulses. The electrical monocycle pulses are sent to transmit antenna 1030 via a transmission line 1032 coupled thereto. The electrical monocycle pulses are converted into propagating electromagnetic pulses by the transmit antenna 1030.” That is, a pulse train of on-off pulses feed the output stage 1028 and the antenna 1030 to produce the emitted electromagnetic signal.

In contrast, the claims of the present invention recite generation of a modulated ultrawideband pulse by modulating an on-off pulse waveform received from a pulse waveform generator. More specifically, the modulation produces the ultrawideband radio frequency pulse. In the Fullerton reference, the on-off pulse is time-modulated before conversion to an ultrawideband RF pulse as is taught to occur in output stage 1028 and antenna 1031.

Applicant further points out in reference to claims 4 and 15 that “generating any suitable waveform” does not contemplate generation of a pseudo-random waveform. Should this rejection be maintained, applicant respectfully requests that a reference showing this element of the pending claims be cited.

Because the present invention produces is therefore different in structure and function from the cited Fullerton reference, these claims are believed to be in condition for allowance.

Reexamination and allowance of claims 1-2, 4, 8, 10-11, 13-15, 18 and 20-21 is therefore respectfully requested.

*Allowable Subject Matter*

Claims 3, 5-7, 9, 12, 16-17, 19 and 22 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Because these claims depend from claims in condition for allowance as explained in greater detail above, these claims are believed to be allowable in their present form as dependent on allowable base claims.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 349-9581 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date

Aug 26 '04

By

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 26 day of August, 2004.

Name

Gina M. Uphus

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